THE FARMER & GARDENER

AND LIVE-STOCK BREEDER & MANAGER.

CONDUCTED BY I. IRVINE HITCHCOCK, AND ISSUED EVERY TUESDAY FROM THE AMERICAN FARMER ESTABLISHMENT, AT $5 PER ANNUM, IN ADVANCE

No. 47. **BALTIMORE, MARCH 24, 1835.** **Vol. I**

☞This publication is the *successor* of the late

AMERICAN FARMER,

(which is discontinued,) and is published at the same office, at five dollars per year, payable in advance.

☞When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

American Farmer Establishment.

BALTIMORE: TUESDAY, MARCH 24, 1835.

FINE MUTTON.—Being in the Philadelphia Market on Saturday morning last, our attention was attracted to a lot of very superior mutton, on the stall of one of the victuallers of that city. On inquiry we found that it was from the farm of our old friend Barney, who has some how the nack of raising sheep in greater perfection than any other man we know. He had just sold a small lot of wethers two years old at $15 a head to this butcher, who lives by the profits on the meat he sells. Will not our farmers learn from such facts, what may be done by skill and attention? Barney has adopted Patch's motto—"that some things can be done as well as others."

We speak of *distance* by *hours*. The Hollanders calculate it by *pipes*! A fixed time, we think is the better mode!—and, in the present prospective state of improvement, the computation of distances will, less and less, be made by *miles*. Indeed, distance is—*the ability to perform it*. It is only rightfully measurable as *price* and *value* are. We have expended fifteen or sixteen hours on the journey from Baltimore to Washington—and three days' hard work in passing from the former to Philadelphia. We well remember when the centre counties of *Pennsylvania* were in the "back woods," further off, *in fact*, than the extreme western point of *Ohio* now is. After a while we shall begin to use *minutes*—i. e. to say, such a place is so many minutes from another! The average rate of travel, perhaps, for twenty years to come, (but we only say, *perhaps!*) will not exceed twenty-five or thirty miles to the hour, whether by steam-boats or steam-waggons—rail-roads as to the latter being regarded.—*Niles' Register.*

Nature of earths with reference to the growth of plants.—The report M. M. Thenard and Sylvester, on a memoir upon this interesting subject by M. J. St. Hilaire, is to the following purport. The author remarks that most persons who have analyzed arable earths, have taken exclusively such as have been cultivated, the original constitution of which has been more or less altered. He believes the various kinds of earths in their first state, have peculiar properties of nourishment to particular plants; and that the exact knowledge of these peculiarities would enable cultivators to put those seeds in the ground, which are most suited to it. From various analysis, he draws the following inferences:—1st, that all earths are composed of silica, aluminia, lime, magnesia, &c. different proportions, together with a vegito animal matter, which is more abundant as the earth is more fitted for the nourishment of plants. 2dly, that plants placed in earths, of which the constituent parts have analogy with the particular nature of the plants, do not exhaust the soil. 3dly, that a series of observations of the different species, genera and families, which grow natural, and in great numbers, perpetuating themselves on certain soils, with the analysis of these soils, would be of great utility in agriculture.—*Rev. Ency.*

[From the Genesee Farmer.]

FOOD OF PLANTS.

Drs. Priestly, Ingenhouse, and Mr. Senebier, have proved that it is the nitrogenous gas which more particularly serves them for aliment.—*Chaptal*, 422.

As the basis of nitrogenous gas is unknown to us, it is difficult to conceive what may be its effect upon the vegetable economy, and we cannot follow it after its introduction into the vegetable. We do not find it again until the decomposition of the vegetable itself, when it reappears in its gaseous form.—*Ibid.* 423.

MR. TUCKER.—Although Mr. Chaptal quotes very high authority, and is himself the most practical and observant of any Chemical author I have ever read, yet I am inclined to be sceptical as to the nitrogenous gas being the food of plants—because I have never observed or detected it in a solid form in any plant. That it does enter the air vessels in common with oxygen and carbonic acid, there can be no doubt; but I believe it is never decomposed, but always retains its *gaseous form*; but the carbonic acid is obviously decomposed,—the carbonic retained, and the oxygen thrown off.

About 16 years since, I was making a coal-pit, in which I put 10 cords of wood, and finding the carcase of a dead dog, out of curiosity I placed it in the pit. After the moisture of the wood was driven off by heat, I drew about 400 bushels of charcoal, and the carcase of the dog, hair and all, was completely charred. From this I infer that the carbon is solidified in vegetable and animal substances; but I could never discover any thing like oxygen or nitrogen in a solid form in coal-pits. I believe they are entirely driven off; but if we consider that carbonic acid is the result of all combustion and putrid fermentation, and that it is decomposed by plants, we shall cease to be surprised that its carbonic principle should be found so abundant in vegetable and animal substances. But truly I cannot conceive how oxygen or nitrogen can form any aliment of plants. Perhaps some of your correspondents can explain it to my understanding, and thereby oblige R. M. W.

Potter, March 4, 1835.

RECIPES, &c.

[Translated for Silliman's Journal of Science and Arts by Prof. J. Griscom.]

Easy method of giving greater strength and firmness to thread, net work, cordage and coarse cloth.—The lixivium of oak bark has been employed for scarcely any other purpose than that of the tanner, and yet it is applicable to a great variety of uses. If thread, cords, nets, coarse linen, &c. be steeped in it, they require greater firmness and durability. Fishermen have long resorted to this. Nothing is more apt to spoil than skins, and yet this preserves them. It is the same with hempen and linen cloth. They contain much gummy and resinous matter, which with tannin forms an envelop, and thus adds to their durability. Linen ought not to steep more than eight or ten days in this solution; it acquires a very brown color. When this color fades the operation may be repeated.

The best method of preserving nets and cordage is the following: dissolve two pounds of Flemish glue in fifteen gallons of water—dip the nets, &c. in this solution, and then steep them in a strong solution of oak or chestnut bark,—the tannin combines with the gelatin, and forms, between the fibres of the hemp, a solid net work which adds great strength to the cords. Any bark which contains tannin may be employed in making a decoction; so bones, parings of skins, remains of fish, &c. and generally all substances containing gelatin may be used in making a gelatinous solution. Fishermen who throw away on the shore gelatinous fish, may use them for this purpose.—*Jour. des Connais. Usuelles.*

A tried recipe for burns.—Keep on hand a saturated solution of alum (four ounces in a quart of hot water,) dip a cotton cloth in this solution and lay it immediately on the burn. As soon as it shall have become hot or dry, replace it by another, and thus continue the compress as often as it dries, which it will, at first, do very rapidly. The pain immediately ceases, and in twenty-four hours under this treatment the wound will be healed, especially if the solution be applied before the blisters are formed. The astringent and drying quality of the alum completely prevents them. The deepest burns, those caused by boiling water, drops of melted metal, phosphorus, gunpowder, fulminating powder, &c. have all been cured by this specific.—*Idem.*

THE FARMER.

INQUIRIES AND REMARKS ON THE EFFECT OF EXPOSING GYPSUM TO THE WEATHER.

Valmont, Jan. 23, 1835.

To the Editor of the Farmers' Register.

I have a parcel of Plaster of Paris which has been several months exposed in hogsheads to all the vicissitudes of weather, wet and dry, hot and cold, even to freezing. It is the leavings of a plaster yard, and this not completely ground, is mostly in a sandy state with some lumps; these lumps will crumble more easily than the lumps as we first receive it. I want to know whether it has totally lost its virtue, or to what extent, by exposure; and whether in preparing it for use, it would be proper to dry it over the fire—for it is quite wet, and seems very unwilling to surrender its moisture. As lime is one of its components, I presume it has been partially slaked, and is therefore more or less weakened. I have subjected it to one test which seems to indicate that it is not entirely destroyed. By heating, and then pouring water upon it, it runs together and forms quite a hard cement. For want of pot or pearl-ash I cannot try it by boiling with that, nor have I the means of determining whether the residuum would be carbonate of lime. When plaster is scattered over the earth it is immediately liable to this slaking process, (if it may be so called) and all the effects of sun, air, and rain; and universal experience I believe attests, that it is slow and *continuing* in its action, not producing its effect by any sudden and powerful impulse. Its action is so slow, that we have a right to suppose it is going on a long time—for months or years—long after the weakening effects of weather upon it have taken place. The result of an experiment at Dover, communicated some years ago to the Agricultural Society, Richmond, proved that the effects of plaster were visible fourteen years, I think, after the plaster was applied: and that I witnessed myself. The slow operation of plaster, results from its *modus operandi*, whether as an *absorbent*, by drawing and retaining moisture around the plant, or as a *solvent*, by preparing vegetable matter for its food. The only difference then, between the application of plaster in its fresh state and in that which I have supposed, is in the point of time whilst (in the first state) the dissolving or *slaking* process occurs. Now, what is the value of that difference?

I will trouble you with another question, whilst we are upon the subject. If plaster acts merely as an *absorbent*, of what consequence is the nature of the soil, provided it is loose enough to allow the powder to descend to the roots, and not so loose as to allow it to pass below them? If as a *stimulant* in any other way, why should not a moist soil be as sensible of its effects as a dry one, provided it is not so wet as to carry off the powder? Would you advise lime or plaster in a wet piece of ground—it being presupposed that all practicable means have been used to drain it? for I believe it may be considered an axiom in agriculture, that for whatever purpose land is intended, it must be laid as dry as possible.

If Mr. Editor, interrogatories generally betray ignorance, much more do they in this particular case—and taking to myself the *compliment* once paid to Pope, I might with propriety subscribe myself a? But not having pride enough to hide my ignorance, I give you my proper appellative, which you will recognize to be that of an old fellow-collegian. C. H. HARRISON.

[The foregoing inquiries proceed from one who has had far more practical experience of the use and effects of gypsum than we have gained—and if that mode of observation and of proof alone were to be the proper test, we ought to take refuge in our want of experience, and remain silent. But as most of the answers sought, must depend altogether upon the established chemical properties of the substances in question, we can scarcely err in deciding according to those properties; and the remarks which follow will be confined within such limits as will prevent our losing sight of this sure guide—without which, none will fail to wander into uncertainty and error.

The slaking of quicklime, alone, is no cause of injury, or weakening of its power—but as this process always precedes or accompanies the injury which is really caused by exposure to air, the slaking of lime is generally considered as evidence of some progress at least having been made in the lime's becoming carbonated, *effete*, or mild, or losing its peculiar qualities as caustic lime.—The newly burnt material for lime, (as shells or limestone,) greedily attracts moisture, and by uniting chemically with water alone, it slakes, but still retains all its caustic power, which depends not on the absence of water, but upon the deprivation of carbonic acid, which the lime had lost by burning. This acid next commences re-combining with the lime, to which it is strongly attracted, and is furnished by the atmosphere, and as well as by the earth, and by plants and other matters in a state of decomposition—and this process of re-combination is greatly hastened by the lime having been slaked, and thereby exposing a far greater attracting surface. Of course, the more it is spread to the air, or to whatever will furnish carbonic acid, the more rapidily the lime loses its caustic quality, until none remains. The lime now, as carbonated or mild, may be in most cases, as valuable a manure as when quick, (as we have elsewhere endeavored to show)—but as a material for cement, and for every purpose for which its caustic state was essential, the lime is weakened and indeed destroyed, by being changed to a different chemical substance.

The general understanding of this result of the exposure of lime, extends improperly to other substances of which lime forms the base, as gypsum, which is generally considered both by dealers in the article, and by many farmers, to be altered and injured by long exposure to air, if ground, and by rain, even in the unbroken stone. To determine whether there can be any such effect we must attend to the chemical combination of gypsum, and its state before and after such kinds of exposure.

Gypsum in its natural state is composed of lime, sulphuric acid, and water, the latter being as much a part of the chemical combination as either of the other ingredients. The mutual attraction of the lime and sulphuric acid is so strong, that no separation can be produced by any thing that air or rain can present. Neither can gypsum be wasted, any more than it can be decomposed, by air alone, or by remaining dry in powder. Water dissolves a very small proportion of gypsum—about one-six hundredth part—and therefore it will be slowly wasted by solution, if exposed to wet, and the fluid be allowed to pass off. The mere wetting, without the fluid sinking or flowing from the mass, however tending to make the gypsum troublesome in using, cannot change its nature, nor affect its value as manure. From these premises it may be inferred that the gypsum saved by our correspondent, is not altered in its chemical character—nor injured, except by being rendered more inconvenient to use—and also in this respect, that the portion previously wasted by the rains, was the part most finely pulverized, softest, and therefore the most fit for immediate action as manure.

Exposing gypsum to moderate heat has no effect except to drive off the water chemically combined, as well as any accidental supply of uncombined moisture. It would seem that merely the removal of its water could scarcely affect the action of the substance as manure. We incline to this opinion—but would not confidently assert that no injury can take place in this manner.—There is in this case a partial decomposition of the substance—and slight as it is, it may materially affect that fertilizing power which is in every aspect so mysterious and inexplicable. It is highly important that it should be proved by sufficient experiments whether a moderate degree of heat is injurious to the value of gypsum—for if it is not, by using heat to drive off the water chemically combined, the stone is made much more soft, and easier to pulverize for use.

These explanations may be considered by many and even by our friend who has suggested them by his inquiries, as too simple and trite to deserve being thus formally presented; and if so, our apology is, that many who are most conversant practically with the subject, show by their course that even these feeble lights might aid their deduction.

There is no known reason, derived from the theory of its operation, why lime (whether caustic or mild) should not act profitably on land not sufficiently drained, except in this respect, that improvements of every kind must avail but little on soils suffering from redundant moisture. As to gypsum on such soils, we know nothing, except the generally received opinion that on all wet land the application is unprofitable.]

[From the Farmers' Register.]

A PRODUCTIVE KIND OF CORN, AND THE MANNER OF ITS SELECTION.

Many years ago Mr. Cooper, a gentleman well known in Jersey as an experienced practical farmer, by a publication recommended that seed corn should be gathered from strong vigorous stalks which bore two ears. I was not then engaged in agriculture, but I well recollect the publication attracted some attention, though I am inclined to think the experiment was not made in this part of the country. A gentleman of Talbot, some years past, whether from the recollection of Mr. Cooper's suggestion, or from his own speculations, I know not, gathered his seed corn in this way, and became convinced of the advan-

tage. His neighbors who saw the increased product, obtained seed from him, and adopted his practice, which in time generally prevailed in Talbot, and has extended to this, and other counties of the Eastern Shore. I recollect a conversation with the late Col. Edward Lloyd on this subject: he was a man of sound judgement, and one of the best practical farmers on this shore. At that period he had not planted his corn, and having experienced in the course of his life both loss and disappointment from the representation of confident theorists and sanguine experimentalists, whose "geese grew into swans," he was in matters of this kind slow of faith; but he became convinced of its value by observation, and tested it by cultivation.

Four years ago I obtained some of this corn, which I have continued to plant since, always carefully gathering the seed according to the suggestion of Mr. C. and my crops have been much increased. My experience induces me to think, that no great advantage is derived if this corn is planted in lands naturally poor, or exhausted by cultivation; but where in a state of fertility either naturally or by improvements, I think the product from this kind of corn will be more than fifteen per cent.

WILLIAM CARMICHAEL.

Wye, Eastern Shore,
Md. Jan. 22, 1835.

THE BREEDER & MANAGER.

[From the Cultivator.]

SHEEP.

CANAAN CENTRE, FEB. 14th, 1835.

SIR—In the February number of the Cultivator, I noticed an extract on wintering sheep, to which I would wish to call the attention of wool growers, and to the truth and importance of which, I can fully attest. I have long believed that the principal cause of any great mortality among sheep, arose from want of sufficient feed, and proper care It is undoubtedly very wrong to let sheep ramble over the fields after the nutriment of the grass on which they feed is materially injured by severe frosts. Sheds, for the shelter of sheep in winter are all important, as exposure to storms is very injurious to them, and I am of opinion, shelters built on the highest part of our pastures for flocks to flee to, in severe storms in summer, would be of great service, as they undoubtedly frequently contract diseases from exposures to long and cold rains, from which they never recover. During such exposure they contract violent colds, which finally become permanently seated on their lungs, and is, in my opinion, the cause of the loss of many sheep. This may be evident to all observing persons, (as they will notice that sheep after such rains are many of them troubled with the snuffles,) and shows the necessity of being very particular to house them during cold nights, and storms, immediately after shearing; the contrast being so great after losing their clothing, that a trifling exposure may prove fatal; and this precaution is more neccessary with fine flocks than with coarse, as they are naturally more delicate, and less able to endure great changes. Water, I also consider very important for sheep in winter, and when it is practicable, should be brought into their yards, so as to be convenient to them at all times. I have four flocks that drink at one trough, and I observe, that when they are feeding at the racks, the water trough will be thronged with sheep; some of them constantly leaving their hay for water, which satisfies me that convenient access to water, adds to their comfort, and consequently to the improvement of their condition.

The above remarks, if you think them worth it, you are at liberty to publish, but my principal object in this communication is, to give to the public, the result of my experience in rearing lambs; and which I am sensible will be lost to all those that neglect their flocks, and to most of those that do not attend to them personally; as care and prompt attention to all their wants is the great secret. To insure the life and health of every lamb, bearing ewes should all be in good condition; then lambs are as likely to live as the young of other animals; but if the ewes are feeble, they will have no milk to support their lambs if they should chance to be strong and healthy. Feeble sheep are often exhausted in bringing forth their young, and consequently will take no notice of them, and strong as well as feeble ones, sometimes need help at such times, which should be done with great caution; they should never be helped except when their pains are on, and when they are trying to help themselves; and the lamb should not be taken entirely away, but left so that the sheep will have to make a little exertion after she is left, otherwise if the sheep is at all wild, she will from fear of the person helping her, make her escape and take no notice of her lamb. I am in the habit of helping every sheep in that situation which I can come at, as it undoubtedly saves them much pain and exertion. Sheep should invariably be housed nights and stormy weather during the time of dropping lambs, and I have been in the habit of housing mine nights, till I wash them, to secure them from the ravages of the foxes. Sheep should have all the facilities for procuring fresh grass that is possible to give them, before and after the time of dropping their lambs, which adds greatly to the quantity as well as quality of their milk; but turning them out on the fields without close attention, is often the cause of losing lambs, as when they are dropt on the cold ground they often become chilled, so as to be unable to get up, and in a short time will be past recovery. When I have neglected mine in that way, and found one that has any life left, I take it immediately to a warm room, and put all but its head into a pail of warm water, and then rub it with a dry cloth till it begins to struggle for life; and I have never failed of restoring such lambs the use of their limbs, though I have found them so far gone as to be unable for some time to observe any expansion of the lungs, with their limbs perfectly stiff, and their jaws almost immoveably fixed. With such attention, you may have them running in about one hour, and to all appearance as strong as if nothing had happened to them; though they require a warmer atmosphere for some time than if they had not been chilled. Care should be taken not to feed them with milk, till they are sufficiently recovered, as there is danger of strangling them by the milk entering their lungs. I have had them injured in that way, which though they lived, would be a long time recovering from the effects of such treatment. Lambs will live twenty-four hours and even longer without any nourishment, and should not as a general rule be fed, till by their actions, you discover they are seeking food, and then they will in most cases drink without much trouble. Many lambs that it becomes necessary to feed, are lost for the want of sufficient food, through fear of over-feeding; but my experience teaches, that they should have all they will drink, and I let their own appetites govern. I have often had lambs of twenty-four hours old drink a pint of milk at once, and when they drink the most, feel the most assured of success in raising them. There will always in a large flock, be some that will not get milk enough. I am in the habit of making all such ones drink that I can, by taking a basin of milk and giving them my thumb to suck, so as to have a full supply once or twice a day, till the milk of the sheep increases by the growth of feed. The milk of such sheep as lose their lambs should not be lost, but kept for the support of those that have not a full supply; such sheep I manage to make own the lambs of others, so that I often have lambs that draw their living from two sheep through the season; this I do when I find the dead lamb before it is dry, by rubbing it over the lamb I wish to make the sheep own, and in that way deceive her, and make her think it her's. Where that will not answer, I skin the dead one, and sew the skin on to the live one, which generally answers the desired end; but in case of failure in both the above experiments, I tie up the sheep and fetter her in a small pen with the lamb and the other sheep, and hold her for the lamb to suck several times in a day, till she will own it. As a proof of the truth of what I have asserted, that care and prompt attention are the great secret of success, I will relate my success last year, which I am far from attributing to any good luck I have over others, as I believe that prosperity or adversity, in all such cases is the result of good or bad management, of care or neglect. Of one hundred and thirty-one lambs I had dropt last spring, I raised one hundred and twenty-six.

A few words as to future management and I have done. Lambs should always be left at home when sheep are to be washed, as they are saved much fatigue where the distance is considerable, and many accidents incident to a pen, crowded as they are at such times; besides the advantage of having the sheep go directly home without any trouble, after washing. Ticks are very injurious to sheep of all ages, but more so to lambs, as they have the trouble of them in summer; the ticks leaving the old ones for a more secure retreat on the lambs. To destroy ticks, I take 10 or 12 lbs. of tobacco stalks for one hundred lambs, (which I buy of the tobacconist for as many pence,) and at the time I shear sheep, put it into a tub sufficiently large to dip them in, and fill it with water, and let it soak six or eight days, when I get up my lambs, mark, dock, and alter them, then dip them into the tobacco juice; this not only kills the ticks, but is serviceable to the wounds made by docking and altering, and is all the remedy I ever apply to such wounds. Dipping the lambs in that way, two successive years, will destroy all the ticks in the flock.

The method of docking lambs by taking hold of the tail and cutting it off while the animal is struggling to escape, is very cruel; as it leaves the bone longer than the skin, which not only makes it very sore, but induces the flies to work at it, which endangers the life of the lamb. My method is, to have a man take up the lamb, and place the tail bottom upwards on the square edge of a block; then with a large knife, I crowd the skin which is loose up to the body, and strike the knife with a hammer, which leaves the skin longer than the bone, and consequently it closes together over the bone, and the wound heals in a short time. I alter lambs by cutting the pouch off close to the body, which leaves nothing to impede the shears, more than cording, and is attended with less trouble. Lambs that have much wool on them, should be sheared about the pouch, to prevent the blood and wool from becoming so hard as to obstruct the discharge of matter from the wound. Lambs should be weaned the last of August, and have a good chance for feed till November; then oats in the bundle two or three months, as their condition may require. I might write much more which would be useful to wool growers who are inexperienced, but I am already admonished that the length of this, may preclude its admission into your valuable paper.

DANIEL S. CURTIS.

J. Buel.

THE GARDENER.

[From Cobb's Silk Manual.]

CULTUE OF THE MULBERRY TREE.

The Chinese Mulberry.

Besides the varieties of the mulberry tree heretofore mentioned, there is one, which, if we may believe the recommendations of it, is superior to all others for the culture of silk: I mean the Chinese mulberry.

The following account of it I derive from the second No. of the Silk Culturist, a valuable and useful work, published by Dr. Felix Pascalis, of New York. It is contained in a letter to the author from Havre.

"Samuel Perrottet, a member of the Linnæan Society of Paris, employed by government as a travelling botanist, returned to this port after a voyage of thirty-four months. He brought with him eighty-four boxes of various dimensions, containing one hundred and fifty-eight species of living plants, of at least eight feet in heighth, to the quantity of five hundred and thirty-four individuals. All these productions had been procured in the seas of Asia, or gathered on the coast or in the lands of Cayenne. From the commencement of the present century, there had never before been so vast an importation—one so extensive in number, for rare genera, species and families, and vegetable productions, or of their seeds. All of them passed under my examination, and they rather appeared to have come out of a green house than from a ship.

"In this immense collection was the *Morus Multicaulis*, thus called by Perrottet, for the first time ascertained to be the real Chinese mulberry, *Morus alba sinensis*, of which every silk grower and culturist should endeavour to multiply the species. It has been deposited in the Royal Garden. Monsier Perrottet says it grows with man shoots from the roots, with tend r stems and large foliage, of a much more nourishing nature than the Eur pean mulberry.

"Chinese inhabitants, assured him, that to this tree the disciples of Confucius are indebted for the prosperity and solidity of their empire.

"The *Morus multicaulis* is already propagating in many parts of France, and probably will be substituted and preferred to all the other varieties. Among the other qualities of the plant, it is affirmed in China that a less quantity of this foliage is required for the precious insects than of that which we are obliged to provide for them."

I have received half a dozen shrubs from Mr. Prince's Nursery on Long Island, which comprise six different varieties of the mulberry, one of which is the Morus multicaulis, and Mr. Prince writes to me that he has them for sale.*

During my late visit to Madame Parmentier's Nursery at Brooklyn, N. Y. in June, 1831, I saw several hundred of these plants, which looked very thrifty, bore very large leaves, seemed to take well to the soil, and grow with uncommon rapidity. I picked several leaves from them, each of which more than covered the crown of my hat. The leaves were given to the silk worms in my presence, and were devoured by them with great avidity. This lady has also twelve different varieties of the mulberry in her nursery, but this seems to be fast taking the place of all others.

I have two of the trees of this species growing in my garden now, (1833) which I obtained at that time and brought home with me. They have stood the severities of two of our northern winters, and survived without any protection or shelter from the weather.

Mr. Richard K. Haight, an intelligent merchant of the city of New York, has one hundred of these plants, which were imported from France the present season, which I saw in his nursery at Brooklyn in a flourishing condition. He has also some Chinese mulberry trees of a different character, which he has imported with great care, and which may prove upon experiment to be valuable.

I obtained the following additional particulars in regard to this variety, and also that of the Dandolo mulberry, from Mr. Kenrick's valuable treatise on fruits, just published.

Morus Multicaulis.

This is a new and most valuable species of Mulberry, for the nourishment of the silk worm, which is represented as possessing such decided superiority over all others, as to be speedily substituted for them in every region of the globe.

This tree has not yet, to my knowledge, borne fruit in America. It was even unknown in Europe as a fruit tree, till in 1830, for the first time, it produced its fruit in France. The fruit, according to M. Audibert, was produced in great abundance; it was long, black, and of sufficiently beautiful appearance; its taste very good, having a taste intermediate between the red and black mulberry. The tree is very vigorous and upright in its growth. The leaves, in a light, friable, rich, and humid soil, are large and cordiform, but in dry and arid soil, they are of less size, eliptical, and without the heart-shaped indentation; their breadth is stated to be six inches, and their length eight; but in rich soils they are sometimes eight inches in breadth, and ten in length, or even more. They are curled or convex on their surface, of a deep shining green, and eminently beautiful.

Remarks on the culture and uses of the Morus Multicaulis, by M. Perrottet, Agricultural Botanist, and Traveller of the Marine and Colonies.—From the "Annales of Fromont."

"The *Morus multicaulis*, which we noticed for the first time in the *Annales de la Societie Linnenne de Paris for* 1824, appears to have originated in the elevated regions of China: from whence it has been disseminated throughout the low plains near the sea shore. It is believed it is cultivated in all parts of that vast empire, where the education of the silk worm is an object of commercial importance. From Canton it was introduced into Manilla, and all the islands in the Asiatic Archipelago, where it was only cultivated for ornamenting gardens. The Chinese are entitled to the credit of this introduction, who, in emigrating from their country, have from motives of industry endeavored to multiply it, that they might render it useful to them, in the new country of their adoption.

"The fortunate discovery of this precious shrub occurred in the garden of a Chinese cultivator at Manilla, who, after having informed us of its properties, and the important purpose for which it was used in his own country, yielded to our solicitations, and sold us two bushels for ten Spanish piastres, assuring us that he had introduced it into Manilla, where it had been considerably extended.

"In August we brought it from Manilla, the capital of the Phillippine Islands, and first introduced it into the isle of Bourbon, from thence into Cayenne and France. At a later period it was sent from Cayenne to Martinique, and from France to Guadaloupe, and also to Senegal, where it has been considerably multiplied. The numerous plants which are already disseminated in the divers climates of Africa, America, and Europe, have been all produced from the two individuals, which we procured at Manilla.

* * * "Among the number of mulberries now cultivated by the Chinese, for the education of silk worms, the *Morus Multicaulis* appears to be the most esteemed of all, not only for the facility with which it is propagated and grows, but still more for the essentially nutritive properties which the leaves possess. We have been enabled to verify this important fact during the five years which we passed in Senegal. * * * The characters which essentially distinguished this mulberry from the other varieties, are those which result, 1st, from the remarkable property which the roots

---

* I have seen a few of the plants of the *Morus multicaulis* in the Kenrick Nursery at Newton, which were transplanted from Mr. Prince's the present season, (1831,) and are now in a flourishing condition. Our nurserymen will find it for their interest to propagate this plant as extensively as they can for the present, by inoculating and grafting.

possess of throwing up numerous small flexible stalks, without forming a principal trunk; 2d, from the great length which these stalks assume in a short time; 3d, from the remarkable development which the thin, tender, and soft leaves speedily acquire, and the promptitude with which they are renewed. * * * And 4th and lastly, from the extraordinary facility with which the stalks and branches strike root, as cuttings, without particular care, even before they have acquired a ligneous consistence.

* * * "Besides the advantages which we have already named, we may still add, that they are admirably calculated for forming regular plantations; it not being natural to grow tall or form any trunk properly so called, they can be placed very near without any injurious effect; and by heading down the stalks annually near the ground, a rich vegetation is produced, with a complete development of vigorous branches and leaves; and finally it is easy to multiply them by thousands from the roots in the course of a year, and to form vast and regular plantations of them the second. But a few years then are sufficient to obtain considerable fields of them in full vigour, sufficient to support an immense quantity of silk worms, and that with the greatest facility, as they are reproduced in a manner almost indefinite. * * * Regular plantations of it can be formed without difficulty, by planting the shrubs at a distance of six or eight feet from each other, a space sufficient for the extension of the branches, to facilitate the culture and for collecting the leaves. This last operation is so much facilitated by the flexibility of the stalks, that a child is sufficient for furnishing the food of a large establishment of silk worms.

Climate, Soil, &c.—* * * "This species will be readily acclimated in Europe; because it originated in an analogous region as to climate, to that which we inhabit. It appears not to suffer from the excessive cold of the northern, or the intense heat of the intertropical regions; for the plants deposited in the gardens of the government at Cayenne, acquired in the space of eight months a truly remarkable development, and at the time of our departure from that colony, in June, 1821, they were clothed with leaves of an extraordinary size. Those also which we cultivated at Senegal, although situated under a dry and scorching sky, and planted in an arid soil, offered an appearance sufficiently satisfactory, but they had acquired less development in all respects, than those which have vegetated under the humid climate of Guiana. It appears expedient then, that plantations of this mulberry should be made upon a humid rather than a dry soil, to obtain in all respects a satisfactory result.

* * * * "Besides, this mulberry braves the most rigorous winters. We saw on our arrival, at Havre, in July last, in the field of M. A. Eyries, plants, which had endured, in the open ground, the winter of 1828, and which appeared vigorous and beautiful."—Thus far M. Perrottet.

On this last and other points, let us now hear the testimony of M. Poiteau, in the *Annales d'Horticulture*, 1830.

"By the information which we receive from all quarters, it appears that this mulberry is destined to replace the common white mulberry, everywhere, for nourishing silk worms; its property of continuing low and bushy, so that the leaves can always be gathered without a ladder; and the large size, abundance, and tenderness of the leaves cannot fail to give it a decided preference. It has been sufficiently ascertained, that they are eaten with avidity by the silk worms, and that the silk which they form is of the first quality. This mulberry has not suffered in the least from the rigours of the last severe winter.

"The zealous traveller, who has given to France, America, and Africa, this precious plant, has acquired a just claim to public gratitude, and it is not only easy, but proper, to give him at this time a proof of it, by affixing his name to the tree which has given him celebrity and which will contribute so much to the prosperity of French Industry." * * * *Note to the Perrottet Mulberry* (*Morus Multicaulis.*)

M. Audibert is also decidedly of the opinion that the best mode of cultivating the *Morus Multicaulis*, for the support of silk worms, is in hedges with low stocks. M. Barthere of Toulouse in the South of France, who has considerably extended their cultivation, fully coincides in the same opinion; and is confident that in grounds and vineyards which could hardily give two per cent, this tree will now insure ten per cent.

This tree, according to M. Perrottet and Dr. Deslongchamps, is easily propagated either by layers, by cuttings, or even by cuttings of a single eye, placed beneath the surface and shaded from the noonday sun.

The experiments instituted at Paris by Dr. Deslongchamps, have confirmed all that had been previously asserted respecting the quality of the silk produced by this plant; he has further stated, that the cocoons, made by the worms fed only on this plant, are even rather heavier.

Dr. Felix Pascalis, in an article in Silliman's Journal of Science for July, 1830, after informing us that in the preceding March he had received two plants of this mulberry from France, has added—"After the discovery of this plant, a doubt no longer exists, that two crops of silk may be raised in a single season."

At Madam Parmentier's Horticultural establishment, two crops of silk were produced in the summer of 1832. The first were fed promiscuously on the *Morus Multicaulis*, *Morus Alba*, and other mulberries. The cocoons thus produced were about two-thirds white and the remainder of an orange colour. A suitable portion of these cocoons were collected for seed, having no regard to colour:—These being subjected to the hatching process, produced a second crop the 30th of July. These last were fed exclusively on the *Morus Multicaulis:* they passed through the different stages of their larva existence in the short space of 26 days. The cocoons which were obtained from this second crop were of a *much larger size* than those of the first crop, but what is of still more consequence *they were of the whiteness of snow, and have a most beautiful shining appearance.* (See New England Farmer, vol. xi. No. ii.) At Madam Parmentier's in 1831, I witnessed the silk worms feeding with avidity on the leaves of the *Morus Multicaulis*, and was informed that they had left eleven other species of mulberry to feed on this. At that place we are also informed, the *Morus Multicaulis* has withstood the rigours of the last six winters uninjured and unprotected. Although being possessed of an active and prolonged vegetation, it is not to be expected that the unripened wood of the tender tips should always escape.

I introduced this plant to Massachusetts in the spring of 1831, from the Messrs. Prince of the Linnæan Botanic Garden, Flushing; I also received plants of the same from Madam Parmentier's of Brooklyn. L. I. and I have also received them from France from M. Andre Micheaux, author of the *American Sylva.*

[From the Horticultural Register.]

We recommend an attentive perusal of the following communication, not only on account of the information it contains, but also because it is a perfect example of the success which usually attends acute and intelligent observation and reasoning combined with real practice.—T. G. F.

ON THE CULTIVATION OF ASPARAGUS.

Having had considerable experience in the cultivation of asparagus, and been so far successful as to raise it nearly two inches in diameter, or between five and six inches in circumference, some of which I exhibited at the Massachusetts Horticultural Society, in the spring of 1833, and which obtained the Society's premium for the largest and best asparagus: having, also, for several years past sold in Quincy market from seventeen to twenty-five cents the bunch, when the same sized bunches of the common kind were selling from six to ten cents, I am induced at this time to inform you and the public of my method of growing this delicious vegetable. I sow the seed in the same manner and time with blood beets in the spring, preparing the ground in the same way, as the young or seedling plants will thrive in soil that will grow good beets. I generally sow, and think it the best way, one row of beets and another of asparagus alternately, one foot asunder, which brings the beet rows two feet apart, the proper distance for this vegetable.

As asparagus makes a very small growth the first season it will not in the least interfere with the beet crop; on the other hand, I think it is rather an advantage to the growth of asparagus, as the large leaf of the former serves to protect the weak and slender shoot of the latter.

The nature of the plants likewise differs so materially, one having a long tap root, calculated to draw deep from the soil, the other very small fibrous roots, which invariably, in this plant more than any I have observed, draw juices from the surface; in this case neither draws food from the other, as is apt to be the case when different vegetables of the same habits and wants grow near each other.

The second season after sowing it will be necessary for the asparagus to occupy the whole ground, the rows being two feet apart, a very proper distance; as the plant makes a large growth the second year, they may stand in the seed rows within an inch of each other. By the above method I have raised from 2 to 5000 roots a year, which I have sold.

In choosing and preparing the ground for putting down an asparagus bed, as it is called, I select a piece of ground that has been under tillage the year previous; a sandy loam if I have it; if

not, I add sand, the washings of roads or other materials, to bring it as near the nature of the above named soil as possible. I then plough very deep if the soil will admit, 10 inches or more; cart on and spread about twenty cart loads of manure, or in that proportion to the acre. I prefer fresh or unfermented horse manure for this as well as for most other crops. After this, cross-plough not quite so deep as before, and trench furrow by running a plough both ways in the same furrow, four feet apart; clear out the trenches with a shovel ten inches deep and one foot wide at the bottom, throwing the earth into ridges between the rows as even as possible; lastly, I draw in from the sides of the trenches a small quantity of fine earth, about one inch deep, levelling it with the hoe as it is drawn in, and the ground is prepared for planting. It is very important that the roots should be taken up carefully and exposed as little to the sun and air as possible previous to planting. My method is to start them from the seed bed and put them under cover or into the cellar as soon after digging as possible; then part the roots, which come up in bunches, snarled together, cut off the fingers (so I name the roots) that are broken and ragged and pack them away in meadow moss until I am ready for planting, which is performed as follows: The roots are taken to the field in a basket, packed in moss, and lifted out as you plant, placing them in a straight line on the bottom of the trench, from twelve to fourteen inches apart, taking hold of the crown of the root and pressing it gently down, carefully spreading the roots or fingers horizontally in every direction, as the roots of asparagus naturally grow horizontal—and the fibres or feeders extend upwards to the surface; this I ascertained by examining a bed that had been hoed after cutting time, in June, immediately before a smart shower. The surface of earth was literally covered with small white fibrous roots. As the bed was situated at the brow of a large hill, a part of it was gullied by the water in one or two places below the main roots, where I had a fine opportunity to examine both roots and fibres. There were few, if any fibres two inches below the main roots, notwithstanding that the bed was put down according to the old method, deep trenching, and filling in six inches below the roots with good rotten manure, which I found safely deposited in rather adecomposed state, having laid several years without being disturbed either by roots, fibres, worms, or weather. It is necessary for a man to follow immediately after the one that places the roots in the bottom of the trench, who has some skill in the use of the hoe; moving backwards, taking care to step each side of the roots in the trench, so as not to disturb them, and with his hoe scraping from each side of the trench regularly, so as to cover the crown of the roots about three inches; and the planting is completed. A field or bed managed in this way has a handsome appearance the first season, if the ridges are kept neat and in a workmanlike manner. Between the rows of asparagus on the top of the ridges, I usually grow a very fine crop of tap rooted plants, which does not in the least injure it the first summer.

After the asparagus shoots have made their appearance about six inches above ground it is a good plan to draw a little earth around the stalks about an inch deep, so as to kill the weeds, which may be repeated in the course of the season without injuring the rows of roots on the ridge. The second year after planting, as soon as the frost is out of the ground, spread along in the trenches, which will then be three or four inches deep, about one inch of light compost manure; then with a plough back furrow every row separately, turning the furrows directly over the asparagus, making two bouts to a row, rake or cross harrow, and the bed will be level, requiring no more care that season except keeping down the weeds. The third spring, as soon as the weather permits, burn the old stalks on the ground, spread at the rate of twenty cart loads per acre, of good compost or horse manure, and plough it in, taking care to turn narrow furrows and not so deep as to injure the crown of the root; then rake or harrow, and the bed will be in readiness for gathering, or cutting, which should be done in the following manner: As soon as the shoots project 5 or 6 inches above the ground, and before the buds begin to open, cut them off with a knife about one inch or less below the surface of the ground (not three or four as is recommended by some theorists,) as all that grows below the surface is stringy and tough and not fit to eat. The old stump immediately decays, and makes the best of food for the plants. I continue cutting, about two months from the time I begin in the spring, having no regard to the twenty-first day of June, or any other particular day, as the plant naturally produces a given quantity of shoots every season, without injury to the roots.

The above method should be pursued yearly, as long as the bed lasts, which in this climate, I presume will continue to produce well from thirty to forty years, under the above treatment. The bed that produced the large shoots I spoke of, was put down in 1819; in 1833, the season I sold my farm, the produce was equal, if not superior, to any former year. Yours, &c.

D. CHANDLER.

Thompson Island, Feb. 9, 1835.

[From the American Farmer.]

A TABLE

Shewing the number of Spaces contained in an Acre of Land, at various given distances.

Feet.		Feet.		Feet.		Feet.	
40	by	40	27	17	by	17	150
39	"	39	28	do	"	16	160
38	"	38	30	do	"	15	170
37	"	37	31	do	"	14	180
36	"	36	33	do	"	13	197
35	"	35	35	do	"	12	213
34	"	34	37	do	"	11	232
33	"	33	40	do	"	10	256
32	"	32	42	do	"	9	284
31	"	31	45	do	"	8	320
30	"	30	48	do	"	7	366
29	"	29	51	do	"	6	427
28	"	28	55	do	"	5	512
27	"	27	59	16	"	16	170
26	"	26	64	do	"	15	181
25	"	25	69	do	"	14	194
24	"	24	75	do	"	13	209
23	"	23	82	do	"	12	226
22	"	22	90	do	"	11	247
21	"	21	98	do	"	10	272
20	"	20	108	do	"	9	302
do	"	19	114	do	"	8	340
do	"	18	121	do	"	7	388
do	"	17	128	do	"	6	453
do	"	16	136	do	"	5	544
do	"	15	145	15	"	15	193
do	"	14	155	do	"	14	207
do	"	13	167	do	"	13	223
do	"	12	181	do	"	12	242
do	"	11	198	do	"	11	264
do	"	10	217	do	"	10	290
do	"	9	242	do	"	9	322
do	"	8	272	do	"	8	363
do	"	7	311	do	"	7	414
do	"	6	363	do	"	6	484
do	"	5	435	do	"	5	580
19	"	19	120	14	"	14	222
do	"	18	127	do	"	13	239
do	"	17	134	do	"	12	259
do	"	16	143	do	"	11	282
do	"	15	152	do	"	10	311
do	"	14	163	do	"	9	345
do	"	13	176	do	"	8	388
do	"	12	191	do	"	7	443
do	"	11	208	do	"	6	518
do	"	10	229	do	"	5	622
do	"	9	254	13	"	13	257
do	"	8	286	do	"	12	279
do	"	7	327	do	"	11	304
do	"	6	390	do	"	10	335
do	"	5	458	do	"	9	373
18	"	18	134	do	"	8	418
do	"	17	142	do	"	7	478
do	"	16	151	do	"	6	558
do	"	15	161	do	"	5	670
do	"	14	172	12	"	12	302
do	"	13	186	do	"	11	330
do	"	12	201	do	"	10	363
do	"	11	220	do	"	9	403
do	"	10	242	do	"	8	453
do	"	9	268	do	"	7	518
do	"	8	302	do	"	6	605
do	"	7	345	do	"	5	720
do	"	6	403	11	"	11	360
do	"	5	484	do	"	10	396

MISCELLANEOUS.

WHEAT FIELDS should be examined to ascertain if the water courses are free from obstructions. Thaws not unfrequently occur during the winter, and furrow drains become choked with snow, ice, and earth, especially if they have not been well cleared of loose earth the previous autumn. Geese often stray upon wheat fields during thaws and do much injury. Whenever open weather occurs during winter, the first inquiry ought therefore to be, "Where are the geese?"

A farm near Monmouth in New Jersey, which was purchased a few years ago for about two dollars an acre, recently sold for thirty. This extraordinary increase of value has been produced by the effect of marl upon the soil. From this, many of our fellow-citizens in the country can infer what treasures they possess, either on their own lands or within reach of them. Land owners throughout Maryland are greatly indebted to the Legislature for providing for a full geological examination of every county in it.

Ft.		Ft.	In	
11	by	9		440
do	"	8		495
do	"	7		565
do	"	6		660
do	"	5		792
do	"	10		435
10	"	9	6	458
do	"	9	0	484
do	"	8	6	512
do	"	8	0	544
do	"	7	6	580
do	"	7	0	622
do	"	6	6	670
do	"	6	0	726
do	"	5	6	792
do	"	5	0	871
do	"	4	6	968
do	"	4	0	1089
do	"	3	6	1244
do	"	3	0	1452
do	"	2	6	1742
do	"	2	0	2178
do	"	1	6	2904
do	"	1	0	4356
9	6	"	9	6 482
do	"	9	0	509
do	"	8	6	538
do	"	8	0	578
do	"	7	6	611
do	"	7	0	655
do	"	6	6	705
do	"	6	0	764
do	"	5	6	833
do	"	5	0	917
do	"	4	6	1035
do	"	4	0	1146
do	"	3	6	1310
do	"	3	0	1528
do	"	2	6	1834
do	"	2	0	2292
do	"	1	6	3056
do	"	1	0	4585
9	"	9	0	537
do	"	8	6	569
do	"	8	0	605
do	"	7	6	645
do	"	7	0	691
do	"	6	6	744
do	"	6	0	806
do	"	5	6	880
do	"	5	0	968
do	"	4	6	1075
do	"	4	0	1210
do	"	3	6	1382
do	"	3	0	1613
do	"	2	6	1936
do	"	2	0	2420
do	"	1	6	3226
do	"	1	0	4840
8	6	"	8	6 602
do	"	8	0	640
do	"	7	6	682
do	"	7	0	732
do	"	6	6	788
do	"	6	0	854
do	"	5	6	731
do	"	5	0	1024
do	"	4	6	1138
do	"	4	0	1281

Ft.		Ft.	In	
8	6	by	3	6 1464
do	"	"	3	0 1708
do	"	"	2	6 2049
do	"	"	2	0 2562
do	"	"	1	6 3416
do	"	"	1	0 5124
8		"	8	0 680
do	"	"	7	6 726
do	"	"	7	0 777
do	"	"	6	6 837
do	"	"	6	0 905
do	"	"	5	6 990
do	"	"	5	0 1089
5	9	"	5	9 1317
do	"	"	5	6 1377
do	"	"	5	3 1442
do	"	"	5	0 1515
do	"	"	4	9 1594
do	"	"	4	6 1683
4	9	"	4	9 1930
do	"	"	4	6 2037
3	6	"	3	6 3555
do	"	"	3	3 3829
do	"	"	3	0 4148
do	"	"	2	9 4525
2	8	"	2	8 8604
do	"	"	2	6 4978
do	"	"	2	3 5531
do	"	"	2	0 6222
do	"	"	1	9 7111
do	"	"	1	8 8297
do	"	"	1	6 9956
do	"	"	1	3 11616
do	"	"	1	0 12445
3	3	"	3	3 4124
do	"	"	3	0 4818
do	"	"	2	9 4873
do	"	"	2	6 5361
1	9	"	1	9 14223
do	"	"	2	3 5956
do	"	"	2	0 6701
do	"	"	1	9 7658
do	"	"	1	6 8935
1	6	"	1	6 19360
do	"	"	1	3 10722
do	"	"	1	0 13403
1	3	"	1	3 27878
do	"	"	1	0 34848
1		"	1	0 43560

Ft.		Ft.	In	
6	"	3	9	1936
do	"	3	6	2074
do	"	3	3	2233
do	"	3	0	2420
do	"	2	9	2640
do	"	2	6	2904
do	"	2	3	3226
do	"	2	0	3630
do	"	1	9	4148
do	"	1	6	4840
do	"	1	3	5808
do	"	1	0	7260
5	9	"	5	9 1317
do	"	"	5	6 1377
do	"	"	5	3 1442
do	"	"	5	0 1515
do	"	"	4	9 1594
do	"	"	4	6 1683
do	"	"	4	3 1782
do	"	"	4	0 1893
do	"	"	3	9 2020
do	"	"	3	6 2164
do	"	"	3	3 2330
do	"	"	3	0 2525
do	"	"	2	9 2754
do	"	"	2	6 3030
do	"	"	2	3 3366
do	"	"	2	0 3787
do	"	"	1	9 4328
do	"	"	1	6 5050
do	"	"	1	3 6060
do	"	"	1	0 7575
5	6	"	5	6 1417
do	"	"	5	3 1508
do	"	"	5	0 1584
do	"	"	4	9 1667
do	"	"	4	6 1760
do	"	"	4	3 1863
do	"	"	4	0 1980
do	"	"	3	9 2112
do	"	"	3	6 2262
do	"	"	3	3 2436
do	"	"	3	0 2640
do	"	"	2	9 2880
do	"	"	2	6 3168
do	"	"	2	3 3520
do	"	"	2	0 3960
do	"	"	1	9 4525
do	"	"	1	6 5280
5	3	"	5	3 1580
do	"	"	5	0 1659
do	"	"	4	9 1746
do	"	"	4	6 1848
do	"	"	4	3 1970
do	"	"	4	0 2074
do	"	"	3	9 2212
do	"	"	3	6 2370
do	"	"	3	3 2552
do	"	"	3	0 2765
do	"	"	2	9 3017
do	"	"	2	6 3318
do	"	"	2	3 3687
do	"	"	2	0 4148
do	"	"	1	9 4741
do	"	"	1	6 5531
do	"	"	1	3 6637
do	"	"	1	0 8297

Ft.		Ft.	In	
5	by	5	0	1742
do	"	4	9	1834
do	"	4	6	1936
do	"	4	3	2049
do	"	4	0	2178
do	"	3	9	2323
do	"	3	6	2489
do	"	3	3	2680
do	"	3	0	2904
do	"	2	9	3168
do	"	2	6	3484
do	"	2	3	3872
do	"	2	0	4356
do	"	1	9	4978
do	"	1	6	5808
do	"	1	3	6969
do	"	1	0	8712
4	9	"	4	9 1930
do	"	"	4	6 2037
do	"	"	4	3 2157
do	"	"	4	0 2292
do	"	"	3	9 2445
do	"	"	3	6 2620
do	"	"	3	3 2821
do	"	"	3	0 3056
do	"	"	2	9 3334
do	"	"	2	6 3668
do	"	"	2	3 4075
do	"	"	2	0 4585
3	3	"	3	3 4124
do	"	"	3	0 4818
do	"	"	2	9 4873
do	"	"	2	6 5361
1	9	"	1	9 14223
do	"	"	2	3 5956
do	"	"	2	0 6701
do	"	"	1	9 7658
do	"	"	1	6 8935
1	6	"	1	6 19360
do	"	"	1	3 10722
do	"	"	1	0 13403
1	3	"	1	3 27878
do	"	"	1	0 34848
do	"	"	1	0 43560

Ft.		Ft.	In	
4	by	2	3	4840
do	"	2	0	5445
do	"	1	9	6222
do	"	1	6	7260
do	"	1	3	8712
do	"	1	0	10890
3	9	"	3	9 3097
do	"	3	6	3318
do	"	3	3	3574
do	"	3	0	3872
do	"	2	9	4224
do	"	2	6	4646
do	"	2	3	5162
do	"	2	0	5808
2	6	"	2	6 6637
do	"	2	3	7740
do	"	2	0	8712
do	"	1	9	9956
do	"	1	6	11616
do	"	1	3	13939
do	"	1	0	17424
2	8	"	2	8 8604
do	"	2	0	9680
do	"	1	9	11062
do	"	1	6	12906
do	"	1	3	15488
do	"	1	0	19360
2	"	2	0	10890
do	"	1	9	12445
do	"	1	6	14520
do	"	1	3	17424
do	"	1	0	21780
1	9	"	1	9 14223
do	"	1	6	16594
do	"	1	3	19913
do	"	1	0	24454
1	6	"	1	6 19360
do	"	1	3	23232
do	"	1	0	29040
1	3	"	1	3 27878
do	"	1	0	34848
do	"	1	0	43560

Ft.		Ft.	In	
3	by	2	3	6458
do	"	2	0	7260
do	"	1	9	8297
do	"	1	6	9680
do	"	1	3	11616
do	"	1	0	14520
2	9	"	2	9 5760
do	"	2	6	6336
do	"	2	3	7040
do	"	2	0	7920
do	"	1	9	9051
do	"	1	6	10560
do	"	1	3	12670
do	"	1	0	15840
2	6	"	2	6 6969
do	"	2	3	7740
do	"	2	0	8712
do	"	1	9	9956
do	"	1	6	11616
do	"	1	3	13939
do	"	1	0	17424
2	3	"	2	3 8604
do	"	2	0	9680
do	"	1	9	11062
do	"	1	6	12906
do	"	1	3	15488
do	"	1	0	19360
2	"	2	0	10890
do	"	1	9	12445
do	"	1	6	14520
do	"	1	3	17424
do	"	1	0	21780
1	9	"	1	9 14223
do	"	1	6	16594
do	"	1	3	19913
do	"	1	0	24454
1	6	"	1	6 19360
do	"	1	3	23232
do	"	1	0	29040
1	3	"	1	3 27878
do	"	1	0	34848
1		"	1	0 43560

ALOES.—The French have discovered a new mode of administering this bitter drug. Since their occupation of Algiers, they have ascertained that it has properties not only internally drastic but externally compressive. In other words, they have found that the aloe contains the material of rope of very superior quality. A long series of experiments are said to have been made at Toulon, to ascertain the comparative strength of cables manufactured from hemp and from aloe, they all resulted in favor of the latter. Of cables of equal size, that made of aloe; raised a weight of two thousand killogrammes; that made of hemp a weight of only four hundred killogrammes. —[*N. Y. Com. Adv.*

A man without modesty is lost to all sense of honor and virtue.

CONTENTS OF THIS NUMBER.

Barney's fine Mutton—Measuring distance by hours—Nature of earths with reference to the growth of plants—Food of plants—Recipe, for giving greater strength to net work, &c.—do. for burns—On exposing Gypsum to the weather—Productive Corn—Sheep Management—Culture of the mulberry, *Morus Multicaulis*—Cultivation of Asparagus—Wheat fields in winter—Great rise in the value of land by marling—Space table—Aloe, vs. Hemp.

BALTIMORE PRODUCE MARKET.

☞ *These Prices are carefully corrected every* MONDAY.

	PER.	FROM	TO
Beans, white field,	bushel.	2 00	2 50
Cattle, on the hoof,	100lbs.	—	6 00
Slaughtered,	"	3 00	4 00
Corn, yellow,	bushel.	65	66
White,	"	66	67
Cotton, Virginia,	pound.	16	17½
North Carolina,	"	—	—
Upland,	"	17½	18½
Feathers,	pound.	35	37
Flaxseed,	bushel.	1 37	1 50
Flour—Best white wheat family,	barrel.	6 00	6 50
Do. do. baker's	"	5 75	6 25
Do. do. Superfine,	"	5 00	5 25
Super Howard street,	"	5 00	—
" " wagon price,	"	4 87	—
City Mills, extra,	"	—	—
Do.	"	5 25	—
Susquehanna,	"	—	—
Rye,	"	—	—
Grass Seeds, red Clover,	bushel.	4 75	5 25
Timothy (herds of the north)	"	2 50	3 00
Orchard,	"	3 00	—
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 25	—
Hay, in bulk,	ton.	—	—
Hemp, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
Hogs, on the hoof,	100lb.	6 00	—
Slaughtered,	"	—	—
Hops—first sort,	pound.	12	—
second,	"	10	—
refuse,	"	8	—
Lime,	bushel.	33	35
Mustard Seed, Domestic,	"	5 00	6 00
Oats,	"	31	33
Peas, red eye,	bushel.	—	—
Black eye,	"	87	1 00
Lady,	"	100	—
Plaster Paris, in the stone,	ton.	3 00	—
Ground,	barrel.	1 37	—
Palma Christa Bean,	bushel.	1 50	1 56
Rags,	pound.	3	4
Rye,	bushel.	66	—
Tobacco, crop, common,	100 lbs	4 25	5 00
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrappery, suitable for segars,	"	6 00	12 00
" yellow and red,	"	8 00	12 00
" yellow,	"	9 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	4 00	5 00
" ground leaf,	"	5 00	9 00
Virginia,	"	5 00	10 00
Rappahannock,	"	—	—
Kentucky,	"	6 00	9 00
Wheat, white,	bushel.	1 05	1 15
Red,	"	1 00	1 06
Whiskey, 1st pf. in bbls	gallon.	32	—
" in hhds	"	31	32
" wagon price,	"	27½	—
Wagon Freights, to Pittsburgh,	100 lbs	1 75	—
To Wheeling,	"	2 00	—
		washed.	*unwash*
Wool, Prime & Saxon Fleeces,	pound.	52 *to* 62	26 *to* 28
Full Merino,	"	46 52	24 26
Three fourths Merino,	"	39 46	23 24
One half do.	"	35 39	23 24
Common & one fourth Meri.	"	32 34	22 24
Pulled,	"	33 35	23 26

BENE SEED.

JUST RECEIVED at this Establishment, and for sale, by the pound or in 12½ cent papers, a small quantity of the seed of this most valuable plant. It is very efficacious in the Bowel Complaints of children, and not difficult to be administered. The seed should be planted in April, in hills like beans, and the leaves will be in perfection in June. Two or three leaves being put into a tumbler of spring water, for 10 or 15 minutes, convert it into succulage, which being tasteless, children readily drink.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
Apples,	barrel.	$3 00	$5 00
Bacon, hams, new,	pound.	11	—
Shoulders,	"	8	9
Middlings,	"	—	—
Butter, printed, in lbs. & half lbs.	"	25	37
Roll,	"	15	25
Cider,	barrel.	—	—
Calves, three to six weeks old	each.	3 00	6 00
Cows, new milch,	"	17 00	30 00
Dry,	"	6 00	10 00
Corn Meal, for family use,	100lbs.	1 50	—
Chop Rye,	"	1 50	—
Eggs,	dozen.	19	20
Fish, Shad, salted,	barrel.	5 75	6 00
Herrings, salted, No. 1,	"	4 75	—
Mackerel, No. 1, 2 & 3,	"	5 50	7 00
Cod, salted,	cwt.	2 50	3 00
Lambs, alive,	each.	1 25	2 00
Slaughtered,	quarter	31	50
Lard,	pound.	8	9
Onions,	bushel.	62	75
Poultry, Fowls,	dozen.	1 50	2 25
Ducks,	"	—	2 50
Potatoes, Irish,	bushel.	40	62
Sweet,	"	—	—
Turnips,	"	37	50
Veal, fore quarters,	pound.	3½	4
Hind do.	"	6½	—

ADVERTISEMENTS

WANTED,

A GOOD JACK & JENNY, or either, for which a fair price will be paid. Address, with *minute description* as to age, color, height, size and general appearance, character as a breeder, and *price*,

I. I. HITCHCOCK,
mh 17 Amer. Far. Estab.

AGRICULTURAL IMPLEMENTS, GRASS SEEDS, &c.

SINCLAIR & MOORE offer for sale at the Maryland Agricultural Repository, Light street, near Pratt street wharf, a general assortment of PLOUGHS of the most approved kinds, adapted to the different kinds of lands and various purposes of the farmer.

Among them are the self-sharpening Plough, which has the advantage of a moveable steel point from 15 to 24 inches long, which can be reversed, as a bevel is formed by wearing, and advanced as it becomes shorter, so as to bring into actual wear from 12 to 18 inches of solid wrought bar—of assorted sizes, from the small seed plough to large three horse.

Wood's patent Plough, of assorted sizes, with cast shares
Sinclair & Moore's improved do do do do
McCormick's improved do do wrought shares
Barshear, from 1 horse to heavy 3 horse, do do
Cary Plough, having the shape of the old well known Cary, but has a cast mould board and wrought share—2 sizes
Buffalo Plough, a well formed mould board for stiff lands, with cast shares
Double and single shovel Ploughs. Also,
Cultivators, with wrought and cast tires
Do do made to expand
Harrows of different sizes and forms.
Wheat Fans, from 15 to $35
Corn Shellers of the best patterns
Cylindrical Straw Cutters, 20 inch box, adapted to horse or water power, capable of cutting 75 to 100 bushels per hour, price $75
14 inch box hand power, 45
11 inch do do do 27
And a general assortment of small articles—such as Hay and Manure Forks: Spades; Shovels; Mattocks; Picks; Hoes; Trace Chains; Hames; Straw Knives.—Also, Thompson's superior cast steel Axes, and other Tools, wove Wire for fans, screens, cellar windows, &c.

FIELD SEEDS—Clover, timothy, herds, orchard grass, tall meadow oat grass seed, and millet seed at lowest market prices—150 bushels prime seed oats.

March 10.

POINTER.

A FIRST rate Pointer Slut, of pure blood, 5 months old, for sale at this establishment. mh 17

FRESH GARDEN SEED.

THE Subscriber has just received by the ship Canada a splendid assortment of English and Dutch Garden and Field Seeds. The respectability of the gentleman by whom these seeds were raised warrants me in recommending them with perfect confidence. But to be certain of the quality and to prevent disappointment to purchasers, proof samples of each sort are taken and will be fully tested in hotbeds prepared for the purpose.

The most prominent received are—

600 lbs. Cabbage Seed, principally of Early Scotch York, Large York, Bullock's Heart, Early George, Sugar Loaf, Drum Head and Flat Dutch. The above named Early York is the dwarf or short stalk variety raised by one of the first Gardeners near Edinburgh.

500 lbs. Mason's short top scarlet, red, and white Turnip, long white and salmon Radish Seed.

50 lbs. Salsafy or Vegetable Oyster.

8 bushels broad Windsor, long pod, and other English Beans.

10 lbs Early and Late Cauliflower Seed, raised from the large Dutch Cauliflower. The quality of this seed may be estimated by reference to the Cauliflowers, whose merits received the premium from the Horticultural Society last year.

10 lbs. Brocoli Seed, finest English sorts.

100 bushels Early and Marrowfat Peas, among which are Bishop's early Dwarf, Spanish Dwarf Fan and Knight's Dwarf, Honey, all fine new sorts, very prolific and growing, only 12 inches high.

375 lbs. Early Dutch Turnips, white Tankard, Yellow Bullock, White Globe and Dale's new Hybred Turnip Seed.

15 lbs. Borecole or Kale Seed of various sorts.

FIELD SEEDS.

30 bushels St. Foin or Espersett and Field Burnett; Spring Vitches or Tares; 100 lbs. Mangold Wurzell; 10 bushels early Potatoes; 5 best English sorts; 10 bushels English Lawn Grass; 200 lbs. Mustard Seed; 15 bushels Perennial Ray Grass; 300 lbs. Rape or Cole Seed; 20 bushels English Oats; 3 best sorts; 300 lbs. white Dutch Clover; 360 lbs. Lucerne; also a small parcel of Yellow and Scarlet Trefoil, &c.

IN STORE.

Parsnip Seed, Carrot, Lettuce, Beet, Cress, Cucumber, Cantaloupe, Onion, Squash, Corn Salad, Artichoke, Swiss Chard, Celery, &c. Nearly all the last named Seeds were raised by R. S. Senr. at the Clairmont Nursery, and are of the finest quality.

Orders for Fruit Trees, Shrubs and Plants received. For particulars, see catalogues; to be had gratis.

ROBERT SINCLAIR, Jr.
At Sinclair & Moore's Maryland Agricultural
March 3. Repository, Light near Pratt street.

SUPERIOR CATTLE FOR SALE,

OF the Devon, and Devon & Short Horn blood, at Brookland Wood Farm, the residence of Richard Caton, ten miles from Baltimore, on the Susquehanna Rail Road and on the Falls Turnpike Road, consisting of

Devon Bulls, Heifers and Calves, of all ages of each denomination, from 8 months to 4 years—price, forty to one hundred dollars each, according to age and quality.

Devon and Durham Bulls, the offspring of Devon Cows by the Short Horn Durham Bull Tecumseh. It is supposed by those persons in England who have dairies of this species, that they will be found superior to all others, uniting the beauty of form, hardiness of constitution, propensity to fatten, and richness of milk appertaining to the Devon blood, and product of milk of the Durham—price forty to one hundred dollars. Apply to

Feb. 3, 1835. THOMAS BEVAN, Manager.

GRAPE VINES.

HERBEMONT S Madeira, one, two, and three years old, from 25 cents to 75 each.

Isabella, two and three years old, at 25 to 50 cts each.
Catawba, one year old, 25 cts. each.
White Scuppernong, two years old, at 37½ cents each.
Sultana, one year old, at 50 cts. each.
Woodson, two years old, at 37½ cents each.
Red Bland, one year old, at 25 cts. each.

Are for sale at this establishment, and will be well packed to go any distance. no. 25